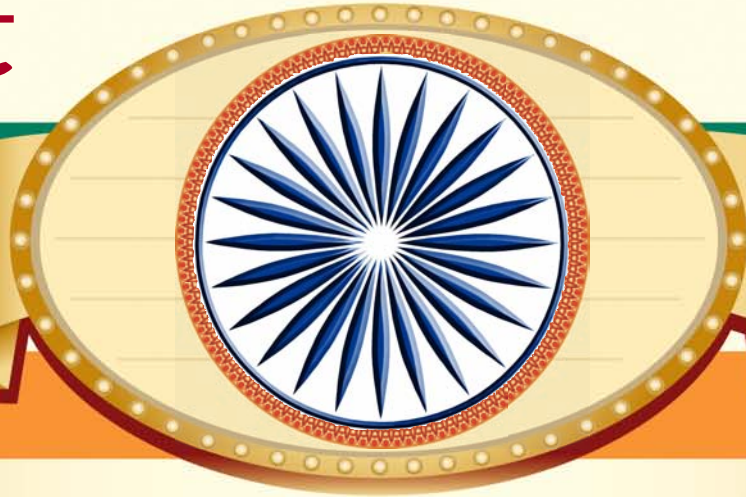


इंटरनेट

मानक



Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

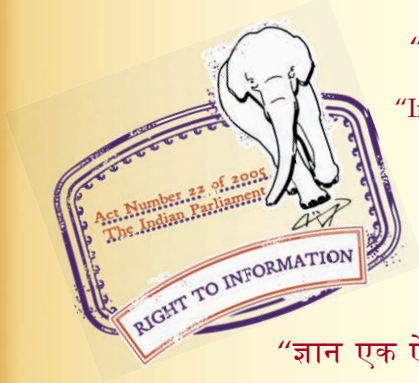
“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 3596 (1967): Glossary of terms relating to hosiery [TXD
10: Hosiery]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”



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Indian Standard
GLOSSARY OF TERMS
RELATING TO HOSIERY

Third Reprint AUGUST 1984
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May 1968

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GLOSSARY OF TERMS RELATING TO HOSIERY

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2. DEFINITIONS

A

***Accordion Fabric** — A weft-knitted fabric, showing a figure design in two or more colours, which is produced on one set of needles by knitting, tucking and missing; and in which tuck loops are introduced to eliminate long lengths of floating thread at the back (*see* Fig. 1).

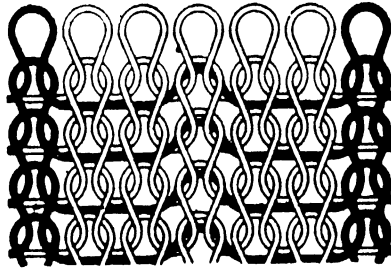


FIG. 1 ACCORDIAN FABRIC

After-Welt — A band on a stocking, following the welt, in which there is a variation of quality, stitch or yarn or both. Also known as ' Anti-ladder Band ', ' Anti-Run-Down Courses ', ' Garter Band ', ' Ladder Stop ', and ' Shadow Welt ' (*see* Fig. 20 on P 23).

Angel Lace — A warp-knitted fabric made with separating threads, usually of secondary cellulose acetate, which are dissolved out to leave narrow strips for trimmings.

***Angora Yarn** — An extremely soft yarn made from the hair of the Angora rabbit. In most cases, it also contains a proportion of other fibre, the amount of which is limited to that which is necessary to facilitate spinning.

Ankle Socks — *See* (a) under ' Anklet '.

Anklet

- a) A knitted footwear where the length of the leg portion just covers the ankle. It has either a turn-over top, elastic top or rib top. Also known as ' Ankle Socks ' and ' Tennis Socks '.
- b) A tubular band knitted on round machines with elastic threads laid-in; used by sportsmen for support and protection to the ankle (*see* Fig. 2).

Anti-ladder Band — *See* ' After-Welt '.

Anti-Run-Down Courses — *See* ' After-Welt '.

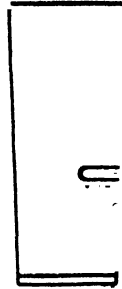


FIG. 2 ANKLET

Argyle — A term describing a style of hosiery which features diagonal effects in different colours.

Astrakhan (Knitted) — A soft thick weft-knitted fabric with curled or crimped yarn in-laid on a tuck-miss basis.

Atlas

- a) *Atlas (Single) — A warp-knitted fabric characterized by having one set of threads progressively traversing in a diagonal direction for a number of courses and returning ultimately in similar manner to the original wale. Also known as 'Single Atlas' and 'Single Vandyke' (see Fig. 3).

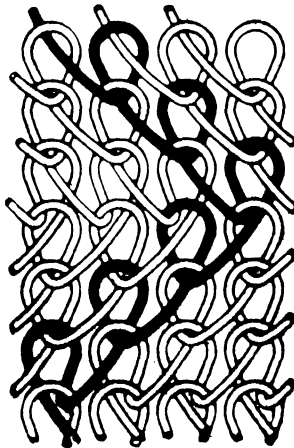


FIG. 3 ATLAS (SINGLE)

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- b) *Atlas (Double)* — A warp-knitted fabric characterized by having two sets of threads making single-atlas traverses, course by course, in opposite direction. Also known as ' Double Atlas ' and ' Double Vandyke '.

Atmospheric Conditions for Testing, Standard — The atmosphere in which physical tests on textile materials are performed. It has a relative humidity of 65 ± 2 percent and a temperature of $27^\circ \pm 2^\circ\text{C}$ (see also IS : 196-1966†).

B

Baby Hood — A round headwear for babies with or without sun shade (see Fig. 4).

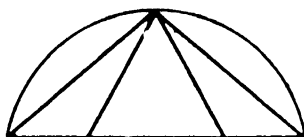


FIG. 4 BABY HOOD (WITHOUT SUN SHADE)

Baby Suit — A set of knitted outerwear for babies consisting of coat or frock and two or more of the following:

Headwear, Trousers or nickers, Bootees or socks, Gloves or mittens.

Backing Yarn — Yarn used on the back of fabric for plated hosiery.

Backwinding — A term describing the process of unravelling a knitted fabric and winding the yarn for re-using.

Balaclave Cap — A long knitted headwear made or tailored out of plain or rib-knitted tubular fabric. Also known as ' *TOPA* ' (see Fig. 5).

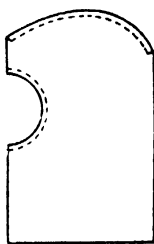


FIG. 5 BALACLAVE CAP

Balanced Twist — The twist in a plied yarn (or cord) is said to be balanced if the yarn (or cord) does not twist on itself when held in the form of an open-loop.

† Atmospheric conditions for testing (revised).

Balbriggan — A light weight plain-knitted cotton fabric generally used for underwear. This name originates from the town Balbriggan in Ireland.

Ball (Yarn) — A package of hand-knitted yarn wound in the shape of a ball without support.

BANIAN — An Indian term denoting all types of vests (*see* ' Vest ').

***Bar (Knitting)** — A fault in a knitted fabric appearing as a light or dark stripe and arising from differences in (a) lustre, (b) dyeing affinity (or unlevel dyeing), (c) yarn spacing or loop length, or (d) yarn count; or from defective plating.

Bathing Costume — A tight-fitting tailored knitwear used in bathing or swimming. Also known as ' Swimming Costume '.

Bathing Trunk — *See* ' Trunk '.

Beret (Knitted) — A round, soft-felted, knitted headwear with flat loose top and tight-fitting at the forehead (*see* Fig. 6).



FIG. 6 BERET

Bight — Distance between the stitching line and the cut edge of a fabric. The term is generally applied to overlock stitching.

Bikini Suit — A two piece, bathing or swimming suit for ladies.

Binding-Off — A term applied to locking or seaming of the last row of loops of a knitted fabric to prevent ravelling.

Bird's Eye Back — The back side of a rib-knitted jacquard fabric obtained by knitting even number of needles of one set at one feeder and odd number of needles of the same set at the other. The bird's eye back is produced to eliminate the elongation of face stitches. When three colours are used, the back side of the fabric will have very small and uniform spots which look like bird's eye.

Bleaching — A series of operations of improving (other than by scouring only) the whiteness by decolourizing the natural colouring matter of the textile materials from their grey state with or without removing the added colouring matter.

Blending — A process aimed at mixing fibres of different lots, types and varieties to produce yarns having desired characteristics.

Blister Fabric — *See* ' Relief Fabric '.

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Blouse — A waist length, tight-fitting outer garment worn by ladies. Also known as 'JUMPER'.

Boarding — A process of putting the knitted garments on boards of suitable size and shape and then pressing and heating under moist or dry conditions to set the garments to the desired shape and size.

Bonnet (Knitted) — A knitted headwear covering the entire head and ears and with strings for tying under the chin. Generally worn by children and ladies (see Fig. 7).

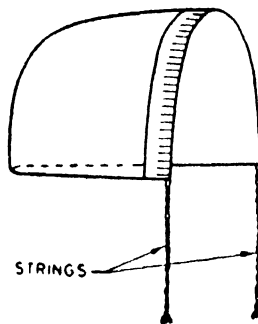


FIG. 7 BONNET

Bootee — A knitted footwear with or without seam usually with fancy rib or purl stitches for infants too young to walk. Also known as 'Infantee' and 'Infant Socks'.

Border (Sweater) — Bottom portion of knitted outer garment usually made in 1×1 , 2×2 rib or of the same fabric as used for the body of the garment.

Bourrelet Fabric — See 'Relief Fabric'.

Bowing — A defect in knitted fabric caused due to curvature of the courses imposed during knitting or calendering or other operations.

Breaking Load — The maximum load (or force) supported by a specimen in a tensile test carried to rupture. It is commonly expressed in grams or kilograms.

Briefs — A tight-fitting underwear without leg portions. Also known as 'CHADDI' and 'JANGHIA' (see Fig. 8).

Broad Rib — A fabric with multiple adjoining ribs which give longitudinal effects in face and back of the fabric.

Example:

6×3 rib

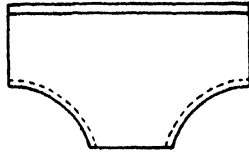


FIG. 8 BRIEFS

Brushing — Raising of the fibres on the surface of the cloth. Also known as 'Napping' and 'Raising'.

BUMBLES — An Indian term for tassels (*see* 'Tassels').

Barson Knit (Stocking) — Knitted stocking shaped to the leg contour and tubular in construction without seam.

C

Cable Stitch — A knitting stitch, which imparts raised effect to the fabric, formed by two or more groups of adjacent wales passing under and over one another and appearing like a twisted ribbon (*see* Fig. 9).

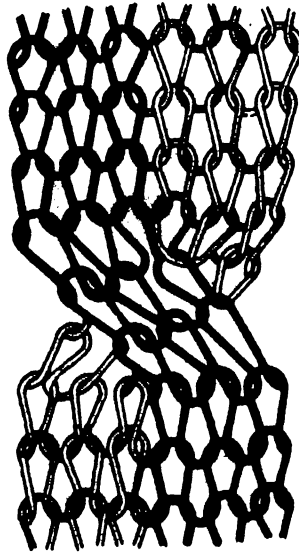


FIG. 9 CABLE STITCH

Calendering — One of the various processes used in finishing cloth by passing it between heated rollers or bowls held under pressure.

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Calf — Fashioned or shaped part of the leg of socks or stocking covering calf portion of the leg (*see* Fig. 20).

Cap — A headwear tailored or knitted to shape.

Cap Comforter — A knitted tubular garment without tassels; used for protecting head against cold. (*see also* ' Comforter ').

Cardigan — A knitted outer garment with long sleeves and front-opening with a closing device generally buttons and with border.

CHADDI — An Indian term for briefs (*see* ' Briefs ').

Chain Stitch

- a) *Single Chain Stitch* — A sewing stitch made from single thread as shown in Fig. 10.

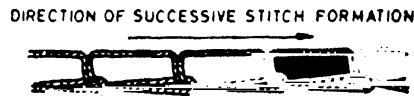


FIG. 10 SINGLE CHAIN STITCH

- b) *Double Chain Stitch* — A sewing stitch made from two threads as shown in Fig. 11.

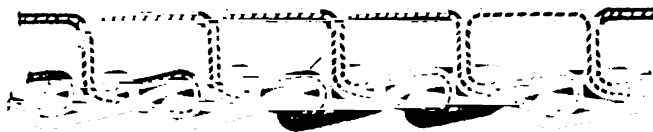


FIG. 11 DOUBLE CHAIN STITCH

Children's Socks — Seamless socks for children.

Cloque Fabric — *See* ' Relief Fabric '.

***Cloudiness** — A defect in a weft-knitted fabric consisting of ill-defined areas of varying density attributable to the use of yarns of irregular thickness.

Coat (Knitted) — A loose-fitting outer garment with long sleeves, pockets and front-opening with a closing device generally buttons but without border.

Coatee — A short length tight-fitting coat generally worn by ladies. Also known as ' KOTI '.

Cockling — An irregular surface effect in knitted fabrics caused by loop distortion due to variation in stitch length and yarn twist.

Combination Suit — An underwear worn by ladies in which vest and drawers/briefs are knitted in one piece. Also known as 'Union Suit'.

Combing — A process of separating or fractionating, in a comber, relatively short fibres from the long and removing the short along with neps and other impurities which have not been removed in the previous processes and simultaneously straightening and parallelizing the long fibres to improve the uniformity of the staple.

Comforter — A knitted tubular garment without tassels; used for protecting neck and chest/head against cold (*see also* 'Cap Comforter').

NOTE — It is longer than cap comforter.

Commercial Moisture Regain — An arbitrary value formally adopted as the regain to be used with the oven-dry weight when calculating

- a) the linear density,
- b) the commercial or legal weight of a shipment or delivery of any specific textile material, or
- c) the weight of specific component in the analysis of fibre blends (*see also* 'Moisture Content' and 'Moisture Regain').

Conditioned Weight — The weight of a textile material conditioned in the standard atmosphere for testing.

***Cordon Yarn** — A two-ply union yarn made from a single cotton yarn and a single, worsted or woollen yarn.

Corduroy (Knitted) — *See* 'Rib Fabric (Knitted) (2 × 2)'.

Correct Invoice Weight — The weight of a textile material in a consignment calculated from its oven-dry weight by adding to it the proportionate commercial moisture regain.

Corset — A stiff tight-fitting undergarment worn by ladies to support body or mould the figure. It extends either from the bust or waist to just below the hips.

Cotton Count — The linear density of cotton yarn expressed as number of 840-yd hanks/lb.

Cotton Lap (Warp Knitting) — A traversing motion in the form of open laps in which warp threads progress by one needle space at each course.

Count — An expression of linear density. The following two groups of systems are in current use:

- a) Direct yarn counts, based on mass per unit length, are proportional to linear density.

$$\text{Direct yarn number} = \frac{\text{mass of yarn specimen}}{\text{length of yarn specimen}}$$

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Example:

When the mass is expressed in grams and the length in kilometres, the resulting value is in tex units.

- b) Indirect yarn counts, based on length per unit mass, are inversely proportional to the linear density.

$$\text{Indirect yarn number} = \frac{\text{length of yarn specimen}}{\text{mass of yarn specimen}}$$

Example:

See ' Cotton Count '.

Course — A transverse row of loops in a knitted fabric or garment.

Courses 5 cm — The number of courses in 5 cm measured along a wale of a knitted fabric or garment.

Crepe Fabric (Knitted)

- a) Any warp or weft-knitted fabric made wholly or partly from crepe yarn.
- b) *A double-faced warp-knitted fabric with more rows of cleared stitches per unit of length on one side than on the other.
- c) *A weft-knitted fabric of irregular surface structure made by random tucking on one set of needles.

NOTE — A crepe yarn may or may not be used to produce fabrics referred to in (b) and (c) above.

Crepe Yarn — Highly-twisted yarn generally with 1 200 to 4 000 tpm, used for producing crepe effect in woven or knitted fabrics.

Crew Neck — A term applied to neck-opening designed, cut or finished in slightly curved form (*see* Fig. 12).

FIG. 12 CREW NECK

Crocheting — An operation of producing fabric with the help of crochet hooks.

***Cross Plating** — In rib-plated fabrics, a reversal of the yarn positions within all the stitches contained in certain courses.

NOTE — A plated rib fabric shows one colour on the plain wales and the other colour on the rib wales, and reversal of the yarn positions for a number of courses, as in ' Cross Plating ' produces a check effect in two colours.

Crowfoot Narrowings — A term used to denote two-needle narrowings.

***Crows' Feet** — A puckering effect, usually in the heel or toe of circular-knitted hosiery and generally associated with the suture line.

Crutch Piece — A piece of fabric used at the bottom of the seat of drawers to join the two-leg portions.

***Cup Seaming** — The joining together of two edges, usually selvages, by through-and-through seaming or overseaming, by means of single, double or treble chain stitch. The edges to be joined are positively fed by two cup-like wheels. Also known as 'Selvage Seaming'.

Cushion Sole — The reinforced sole with terry loop surface in knitted footwear.

Cut Glove — See 'Cut Hosiery'.

Cut Hose — See 'Cut Hosiery'.

Cut Hosiery — Hosiery made to shape by cutting out and seaming flat or tubular knitted fabric.

Cut Stocking — See 'Cut Hosiery'.

Cut Underwear — See 'Cut Hosiery'.

D

Darning — Correction of defects, imperfections and damages in fabrics and garments by thread and needle. Also known as 'Mending'.

DASTANA — An Indian term for glove (see 'Glove').

***Derby Rib** — A term applied to 6 × 3 rib.

Diamond Hose — Hose with solid diamond designs.

Dimensional Change — The decrease or increase in dimensions (that is in length or width or both) after subjecting the fabric or garment to the prescribed test, expressed as a percentage of the corresponding dimensions before such test.

Double Atlas — See (b) under 'Atlas'.

Double Chain Stitch — See (b) under 'Chain Stitch'.

Double-Faced Fabric — Also known as 'Double Tricot Fabric'.

- a) ***Simplex Fabric** — A double-faced fabric usually made on two needle-bars of a bearded-needle warp knitting machine, the two sets of warp threads are meshed together successively on each needle bar to produce a fabric that normally has the same appearance on both sides.

- b) **Duplex Fabric* — A double-faced fabric composed of two fabrics pasted together, face sides outward, each having been produced on one needle bar of a warp knitting machine. These fabrics are often identical, in which case the duplex fabric resembles simplex fabric in appearance.

Double Jersey Fabric — A thick fabric made on a rib knitting machine intended for outerwear. Also known as 'Double-Knit Fabric'.

Double Jersey Jacquard Fabric — A thick fabric made on a rib knitting machine with jacquard design intended for outerwear.

Double-Knit Fabric — See 'Double Jersey Fabric'.

Double Pique Fabric — See (b) under 'Pique (Weft Knitting)'.

Double Sole — The sole of a knitted footwear reinforced with an extra yarn.

Double Top Stocking — A stocking with a welt (at the top) formed by turning over the upper portion of the stocking and knitting or sewing it down.

Double Tricot Fabric — See 'Double-Faced Fabric'.

Double Vandyke — See (b) under 'Atlas'.

Drawers — Knitted underwear with leg portions made to cover from the waist to the knees or ankles as under:

- a) *Short Drawers* — with short legs reaching well above the knees,
- b) *Half Drawers* — with legs reaching up to the knees, and
- c) *Full Drawers, Long Drawers or Under Pants* — with legs reaching up to the ankles.

***Draw Thread** — A thread introduced in the form of one row of loops during knitting which, on removal, permits the separation of articles that are knitted in a succession of units connected together.

Drop Stitch, Dropped Stitch — A defect in a knitted fabric which may result from a defective needle, improper feeder setting, or other causes. It occurs when a needle (or needles) misses to receive the yarn but casts off its old loop at the same course. Also known as 'Missed Stitch'.

Duplex Fabric — See (b) under 'Double-Faced Fabric'.

E

***Edging** — A narrow strip of knitted fabric or lace attached to another fabric or made-up article by one edge, usually for decorative purposes.

***Eight Lock** — A double faced 2 × 2 or broad-rib fabric with crossed sinker wales.

Elasticity — That property of a material by virtue of which it tends to recover its original size and shape immediately after removal of the stress causing deformation.

Elastic Top — Top (of socks or stockings) in which elastic or rubber threads have been laid-in during knitting.

Elbow Cap — A tubular band knitted on round machines with elastic threads laid-in; used by sportsmen for support and protection to the elbow (*see* Fig. 13).



FIG. 13 ELBOW CAP

Embroidered Hosiery — Hosiery with ornamental motifs or patterns produced by hand or machine with the help of threads after the article has been knitted. This is distinguished from the hosiery where patterns are produced during the process of knitting itself.

English Welt — *See* ' Roll Welt '.

Epaulette — Ornamental shoulder-piece of uniforms, such as badges.

***Eyelet** — An openwork effect produced by transferring sinker loops to two adjacent needles. Usually two consecutive sinker loops are collected and transferred.

F

Fabric — A term which covers all types of cloth or cloth-like textile materials independent of construction, method of manufacture or nature of the material used.

Fabric Glove — Same as ' Cut Glove '.

Fabric Hose — Same as ' Cut Hose '.

Facing Yarn — Yarn used on the face of fabric for plated hosiery.

***Fall Plate Fabric** — A fabric of a tuck-like structure which is made on one needle bar on a Raschel warp knitting machine, involving the use of a solid

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metal plate (fall plate or chopper bar) to push down the newly formed laps below the spoons of the open latches to be cast off with the ground laps of the previous course.

Note — Often a yarn is used which could not otherwise be incorporated in the particular fabric.

Fascinator — Decorative headwear worn by ladies.

Fashioned Hosiery — See ' Fully-Fashioned Hosiery '.

Fashion Marks — Stitch marks, arising during narrowing and widening through transference of loops to adjacent needles during the course of shaping in fully-fashioned hosiery.

Fastness (Colour) — The resistance of the colour of textile materials to different processes and agencies to which they may be subjected during manufacture and subsequent use.

***Felling** — The flattening of an overseam by stitching it down, usually with a single chain stitch.

Felting Shrinkage — The decrease in dimensions of a fabric or garment after milling, expressed as a percentage of the corresponding original relaxed dimension.

Finishing (Hosiery) — The term ' finishing ' usually includes in addition to bleaching and dyeing processes, the cutting out, sewing together, shaping of the garment and pressing etc.

***Fisheye** — See ' Pin Holes '.

Fishnet — A float plated structure wherein the missed yarn is usually thicker than the ground yarn. The missed thread will occur in odd wales for 1 to 4 courses and then in even wales for the same number of courses.

Note — The term ' fishnet ' is now loosely applied to many other open-knitted structures.

Flat Knit — A term used to describe fabrics knitted on a flat machine in contrast to those knitted on a circular machine.

Flatlock Stitch — A sewing stitch which makes the sewn portion lie flat and not raise above the surface of the fabric. These stitches are more often used in underwear.

Fleecy Fabric — In a generic sense, it denotes all types of knitted fabrics which are brushed or raised on the surface to give smoothness and possibly warmth.

Float Plating — An effect in a plain-knitted plated fabric which is produced when the face yarn is missed by certain needles to allow the other yarn to appear on the face.

Float Stitch — A stitch in a plain-knitted fabric where a length of yarn is not received by the needle (or needles) and the yarn connects two loops of the same course that are not in adjacent wales. This portion of yarn floats at the back of the fabric. Also known as ' Missed Stitch ' or ' Press-Off Stitch ' (see Fig. 14).

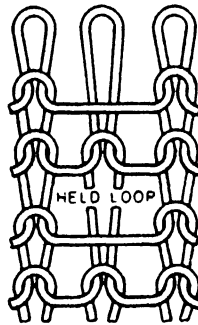


FIG. 14 FLOAT STITCH (BACK SIDE OF FABRIC)

Fly Front — A flap of material attached by one edge to underwear for extra coverage.

Footless Stocking — A turn-over top seamless stocking without foot portion; generally worn by sportsmen.

Footwear (Knitted) — Knitwear used as covering for the leg or foot or both, for example, socks, stockings, hose tops, anklets, etc.

French Foot — The foot of a fully-fashioned stocking with a continuation of the seam down the centre of the sole and with fashion marks near heel and toe.

French Welt — See ' Tubular Welt '.

Full Cardigan Stitch — A stitch produced by tucking on 1 × 1 rib basis as under:

First Course — Tuck all rib needles, and knit all plain needles; and

Second Course — Knit all rib needles, and tuck all plain needles

Also known as ' Polka Rib ' (see Fig. 15).

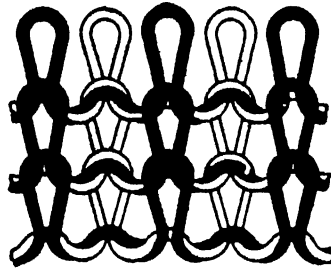


FIG. 15 FULL CARDIGAN STITCH

Full Drawers — See (c) under 'Drawers'.

Full-Fashioned Hosiery — See 'Fully-Fashioned Hosiery'.

Fully-Fashioned Hosiery — Hosiery which is shaped wholly or in part by widening or narrowing or by both by loop transference to increase or decrease the number of wales knitted on a flat bed weft-knitting machine without alteration of the character of the stitch. Also known as 'Fashioned Hosiery', 'Full-Fashioned Hosiery' and 'Selvedged Hosiery'.

G

GANJI — An Indian term denoting all types of vests (see 'Vest').

Garment — An individual piece of clothing.

Garter Band — See 'After-Welt'.

Gas Mantle — A dome-shaped knitted article made of ramie, rayon or cotton and treated with suitable chemicals; used for heating to incandescence in pressure lanterns to give the rated luminosity.

Gassed Yarn — A yarn that has been passed through a gas flame to remove protruding fibres and improve the yarn by making it smoother and brighter in appearance. Also known as 'Singed Yarn'.

Gassing — A process of burning off protruding fibres from the surface of yarn or cloth to obtain a smooth surface. Also known as 'Singeing'.

*Gauge

- a) A term specifying the spacing of the loop-forming elements in knitting and ancillary machines and expressed as the number of elements per unit of length.
- b) A term specifying the physical dimensions, usually thickness, of loop-forming elements.

NOTE — The gauging systems in common use are given in Appendix A.

Glove — A covering for the hand and wrist with a sheath each for the four fingers and the thumb. Also known as 'DASTANA'.

Golf Hose — Heavy wool stockings for sportsmen, made in fancy designs and turn-over tops.

Gore Line (Heel) — The line on either side of the heel of socks or stockings made on circular machine, formed while shaping the heel (see Fig. 43 on P 41).

Gore Line (Toe) — The line on either side of the toe of socks or stockings made on circular machine, formed while shaping the toe (see Fig. 43).

Grey Hosiery — Hosiery which is not scoured, bleached or dyed.

GULUBAND — An Indian term for muffler (see 'Muffler').

Gusset — An extra piece of material sewn to a garment for reinforcement.

Gymnasium Hose — Hose extending beyond the knees; generally worn by gymnasts.

H

Hair Net — A net-covering to retain the hair in order.

Half Cardigan Stitch — A stitch produced by tucking on 1 × 1 rib basis as under:

First Course — Tuck all rib needles, and knit all plain needles; and

Second Course — Knit all rib needles, and knit all plain needles

Also known as 'Royal Rib' (see Fig. 16).

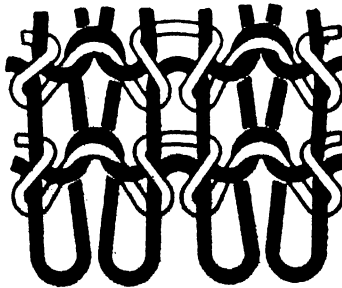


FIG. 16 HALF CARDIGAN STITCH

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Half Drawers — See (b) under 'Drawers'.

Half Hose — See 'Socks'.

Hand-Knitting — A term applied to knitting done by hands with the help of knitting pins.

Hand-Knitting Yarn — Yarn intended for hand-knitting.

Handwear (Knitted) — Knitwear used as covering for hand or wrist or both, for example, gloves, mittens, wristlets, etc.

Headgear (Knitted), Headwear (Knitted) — Knitwear used as covering for head, for example, balaclava cap, beret, *TOPA*, etc.

Heel Gore Line — See 'Gore Line (Heel)'.

Held Loop — A loop which, having been pulled through the loop of the previous course, is retained by the needle during the knitting of one or more additional courses (see Fig. 14 and Fig. 49 on P 46).

***Held-Loop Fabric** — See 'Relief Fabric'.

Hem — The edge of a fabric garment doubled over and sewn to strengthen or prevent it from fraying. It may also be used as a finish or a decoration on a garment. Also known as 'Seamed Welt' (see also 'Welt').

High Neck — A term applied to neck of a knitted outerwear, designed or finished in tubular high shape to cover the neck fully or partly. It may be single or turn-over type (see Fig. 17).

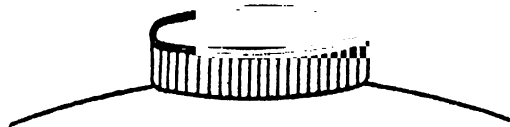


FIG. 17. HIGH NECK

High-Spliced Heel — A heel where splicing is introduced high above the shoe line.

Honeycomb Design — A design characterized by cell-shaped cavities on the face of a weft-knitted fabric made on tuck stitch basis. A typical honeycomb design fabric is produced as follows:

<i>Courses</i>	<i>Rib Needles</i>	<i>Plain Needles</i>
1 and 2	Tuck on odd and non-knit on even	Knit all
3	Knit all	Knit all
4 and 5	Tuck on even and non-knit on odd	Knit all
6	Knit all	Knit all

Hose — Knitted footwear where the leg length extends beyond the knee.

Hose Top — A tube-like seamless rib fabric used for covering the leg portion from ankle to knee. It is worn over the socks.

Hosiery — A term applied to all types of knitted goods made from yarns; may be made either by hand-knitting or machine-knitting.

Hosiery Yarn (Cotton or Wool) — Yarn with low twist but strong enough for machine-knitting.

I

Imitation Rib — An effect resembling ribbed texture produced on a plain-knitted fabric either by systematically removing the needles or closing the beard of needles during knitting. Also known as 'Mock Rib'.

Infantee, Infant Socks — See 'Bootee'.

Infant Suit — A baby suit for infants (see 'Baby Suit').

Ingrain Yarn — See 'Top-Dyed Yarn'.

In-Laid Fabric — See 'Laid-in Fabric'.

Instep — Upper part of the foot of socks or stockings.

Intarsia Design — A design in weft-knitted fabrics in two or more colours which are solid from front to back. Each area of colour is knitted from a separate yarn which is contained within that area. Generally a detached motif is made in colour on different coloured ground. Also known as 'Solid Design'.

Interlock Fabric — A double 1×1 rib-knitted fabric with crossed sinker wales. The wales on one side of the fabric are immediately behind the wales of the other side of the fabric. The appearance of the fabric is same on both sides.

Inturned Top Stockings — A stocking with inturned welt at the top.

Inturned Welt — A welt made by folding a plain fabric backward and then joining the starting end with the main body of the fabric during the process of knitting. Also known as 'Turned Welt'.

J

Jacket (Knitted) — A short outer garment generally of hip length, with full sleeves and tight-fitting border.

Jacquard Fabric (Knitted) — A knitted fabric with designs generally in colour made on the basis of needle selection.

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JANGHIA — An Indian term for briefs (*see* 'Briefs').

Jersey — Pullover with a hem at the bottom.

Jersey Fabric — *See* 'Plain Fabric (Knitted)'.

JUMPER — An Indian term for blouse (*see* 'Blouse').

JURAB — An Indian term for socks and stockings (*see* 'Socks' and 'Stockings').

K

Knee Cap — A tubular band knitted on round machines with elastic threads laid-in; used by sportsmen for support and protection to the knee (*see* Fig. 18).



FIG. 18 KNEE CAP

Knitted Fabric — Fabric produced by the process of knitting.

Knitted Garments — Garments made by knitting or out of knitted fabrics.

Knitted Goods — Goods made by knitting or out of knitted fabrics.

Knitting — A process of producing a texture by intermeshing series of loops.

Knitwear or Knitted-Wear — Knitted goods used as apparel.

Knop Design — Designs produced by consecutive tucking and knitting basis on plain fabrics and consecutive tucking, knitting and missing basis on rib fabrics. This gives an effect of raised spots (*see* Fig. 19).

KOTI — An Indian term for coatee (*see* 'Coatee').

L

Lace Stitch (Knitting) — A stitch produced on one set of needles in welt-knitted fabrics by transferring either partially or wholly a loop from one needle to another.

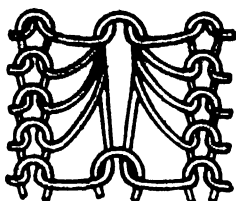


Fig. 19A

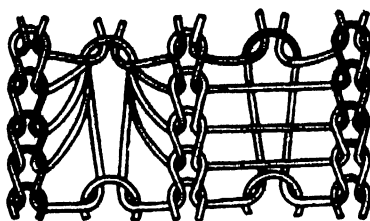


Fig. 19B

FIG. 19 KNOP DESIGN

Ladder — A sequence of drop stitches in a single wale. It appears like a ladder.

Ladder Stop — See 'After-Welt'.

Ladies' Hose, Ladies' Stocking — A fine-knitted ladies' footwear where the length of the leg portion extends well above the knee. It has generally a broad welt at the top. (see Fig. 20).

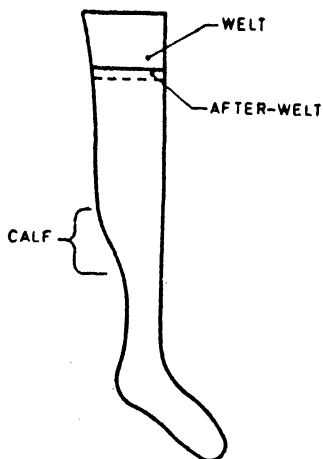


FIG. 20 LADIES' STOCKING

Laid-in Fabric — A knitted fabric containing non-knitted yarns, which are held in position by the knitted yarns. Also known as 'In-Laid Fabric' (see Fig. 21).

Lea (Cotton) — A continuous length of yarn measuring 120 yd in the form of coil made on 1.5-yd girth reel.

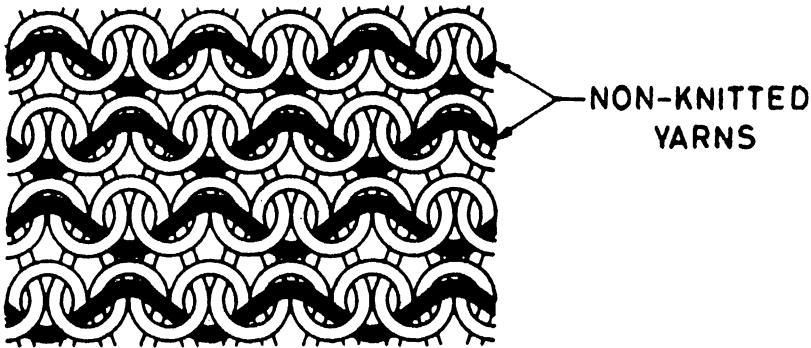


FIG. 21 LAID-IN FABRIC

Lingerie — Ladies' underwear, slumberwear and similar garments of fine texture and aesthetic appeal.

Lininess — Longitudinal defect(s) caused by structural distortion in knitted fabric.

Linking — A method of joining the loops of the edges of a piece of knitted fabric or fabrics together by a single or double chain stitch passing through opposite loops in the same course. Also known as 'Point Seaming' or 'Point-to-Point Seaming'.

Links-Links Fabric — See 'Purl Fabric'.

Lisle Yarn — A highly-twisted, plied (usually two-ply), good quality cotton hosiery yarn, spun generally in fine counts. All lisle yarns are gassed and some may be even mercerized.

***Locknit Fabric** — A fabric (see Fig. 22) made on warp knitting machine with one needle bar and two full-set guide bars, where the guide-bar movements are controlled as follows:

<i>Front Guide Bar</i>	2-3, 1-0, and repeat; and
<i>Back Guide Bar</i>	1-0, 1-2, and repeat

Lock Stitch — A two-thread sewing stitch by which the lower thread is interlocked with the upper thread and held fast (see Fig. 23).

Long Drawers — See (c) under 'Drawers'.

Loop (Knitting) — The fundamental unit formed by bending of the yarn. In a knitted structure this is supported by and intermeshed with other units (see Fig. 24).

- a) *Needle Loop* — The upper curved portion of the loop.
- b) *Sinker Loop* — The lower curved portion of the loop.

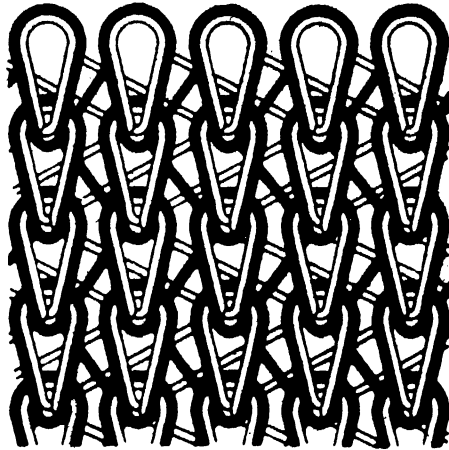


FIG. 22 LOCKNIT FABRIC

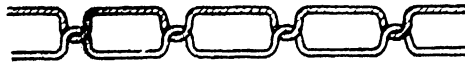


FIG. 23 LOCK STITCH

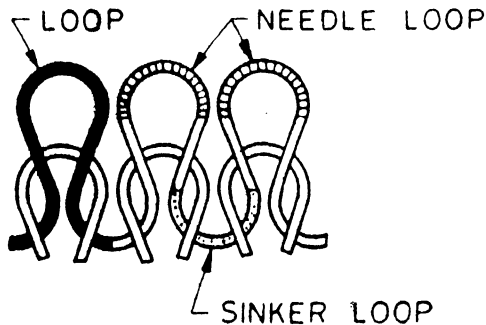


FIG. 24 LOOPS (KNITTING)

Loose Course — A course where the loops are kept looser or longer than the loops of the other courses of the fabric or garment.

M

Making-Up — A term applied to the conversion of fabrics into garments.

Matinee Coat (Knitted) — Ladies' light-weight coat with open front and without any closing device.

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Mending — See 'Darning'.

Mercerization — A process of treating cellulosic textiles (generally cotton) in the form of yarn or fabric with a solution of caustic alkali of a certain concentration under specified conditions which increases their lustre and dye affinity.

Merino Wool — Wool from Merino sheep, normally having a mean fibre diameter of 25 microns or less.

Merino Yarn — Yarn made from Merino quality wool.

Mesh Fabric — See 'Net (Knitted)'.

***Milanese Fabric (Circular Warp-Knitting)** — A tubular warp-knitted fabric made with two full sets of warp threads traversing continuously in opposite directions (see Fig. 25).

NOTE — The manner of traversing the threads is always cotton lap.

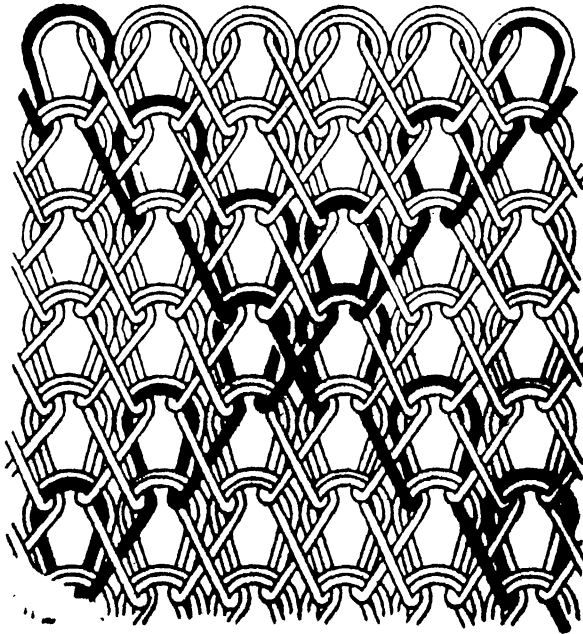


FIG. 25 MILANESE FABRIC (CIRCULAR WARP-KNITTING)

***Milanese Fabric (Warp-Knitting)** — A warp-knitted fabric normally made with a full set of warp threads (that is, containing twice as many threads as there are wales in the fabric). The threads are continuously

divided into two equal warp sheets, one set of which traverses to the right continuously and the other set to the left, such that any particular thread traverses the full width of the fabric, and on reaching the selvage is transferred to the other set (see Fig. 26).

NOTE — The manner of traversing the threads may be either silk lap or cotton lap.



FIG. 26 MILANESE FABRIC (WARP-KNITTING) WITH SILK LAP

Milani Rib — A three course weft-knitted rib structure, knitted as follows:

Course 1 — 1 × 1 rib knitting;

Course 2 — Plain needles knitting, rib needles non-knitting; and

Course 3 — Rib needles knitting, plain needles non-knitting.

Milling — A process of consolidating or compacting fabric, which usually, though not exclusively, contains wool to obtain the required cover and firmness of texture.

Missed Stitch — See ' Drop Stitch ' and ' Float Stitch '.

Mitten — A covering for the hand and wrist. The difference between a glove and a mitten is that the former has a sheath for each of the four fingers and the thumb, while the mitten has either one sheath for the entire four fingers and one for the thumb or it has no sheath for the fingers and thumb at all.

Mock Rib — See ' Imitation Rib '.

Moisture Content — The weight of moisture in a textile material, expressed as a percentage of the total weight.

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NOTE — If 100 parts by weight of material contains 20 parts, by weight of moisture, the moisture content is

$$\frac{100 \times 20}{100} = 20 \text{ percent}$$

Moisture Regain — The weight of moisture present in a textile material expressed as a percentage of the oven-dry weight.

NOTE — If 100 parts by weight of material contains 20 parts, by weight of moisture, the moisture regain is

$$\frac{100 \times 20}{80} = 25 \text{ percent}$$

Monkey Cap — A knitted cone shaped cap that covers the head; usually, has a pompon at the apex. Also known as 'TOPA' (see Fig. 27).



FIG. 27 MONKEY CAP

Muffler — A long, narrow-width flat or tubular-knitted fabric with tassels at both ends; generally worn around the neck. Also known as 'GULUBAND' (see Fig. 28).

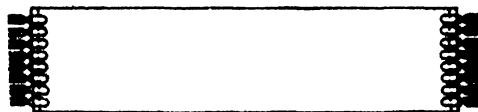


FIG. 28 MUFFLER

Mungo — The fibrous material made in the woollen trade by pulling down new or old hard-woven or milled cloth or felt in rag form (see also 'Shoddy').

Mutton Cloth — See 'Stockinette'.

N

Napping — See 'Brushing'.

Narrowing — The act of reducing the width of the fabric or garment by decreasing the number of wales by stitch transferring during knitting to get the desired shape.

Neckwear (Knitted) — Knitwear used as covering for neck, for example, mufflers, scarves, ties, etc.

Needle Lines — Longitudinal lines in fabric or garment produced due to defective functioning of the needle(s).

Needle Loop — *See* (a) under ' Loop (Knitting) '.

Net (Knitted) — A knitted fabric of an open texture. Also known as ' Mesh Fabric '.

***Niantic Foot** — A fully-fashioned hose foot, made in two parts with the seams on either side of the foot and with seamless heel and toe pouches. The complete hose with niantic foot is made on two machines known as ' legger ' and ' footer '.

O

One-Piece Beret — Beret knitted in one-piece [*see* ' Beret (Knitted) '].

One-Piece Garment — A knitted garment made from one piece of material without any joining at the shoulders and of the sleeves to the body (*see* Fig. 29).

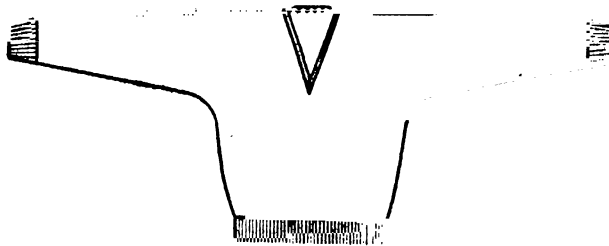


FIG. 29 ONE-PIECE PULLOVER

Opera Hose — A hose extending up to the hip, generally used by opera artists.

Ottoman Rib Fabric — *See* ' Relief Fabric '.

Outerwear (Knitted) — Knitwear worn as outer garment; for example, cardigan, pullover, shirt, slipover, etc.

Oven-Dry Weight — The weight of a sample of textile material dried to substantially constant weight in an oven maintained at $105 \pm 3^{\circ}\text{C}$ temp and supplied with air at the standard atmospheric conditions (65 ± 2 percent RH and $27 \pm 2^{\circ}\text{C}$ temp).

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Overboarding — An undesirable practice of boarding the garments to oversize.

Overknit Fabric — See (b) under 'Pique (Weft Knitting)'.

Overedging, Overlocking, Overseaming — Sewing by overlock stitches.

Overlock Stitch

- a) *Two-Thread Overlock Stitch* — A sewing stitch made from two threads used for hemming purposes. The edge of the fabric is first cut by knives incorporated in the machine and then the stitch is made over the cut edge of the fabric to join it with the main fabric (see Fig. 30).

DIRECTION OF SUCCESSIVE STITCH FORMATION



FIG. 30 TWO-THREAD OVERLOCK STITCH

- b) *Three-Thread Overlock Stitch* — A sewing stitch made from three threads used for joining two or more pieces of fabric. The edges of the fabrics are first cut by knives incorporated in the machine and then the stitch is made over the cut edges of the fabrics to join them together (see Fig. 31).

DIRECTION OF SUCCESSIVE STITCH FORMATION

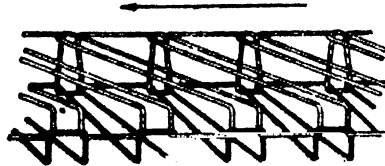


FIG. 31 THREE-THREAD OVERLOCK STITCH

P

Pairing — Putting together two complementary units of footwear or gloves of the same type, size and shape.

Pearl Fabric — See 'Purl Fabric'.

Pelerine — A cellular effect produced on knitted fabric by transferring formed sinker loops (see Fig. 32).

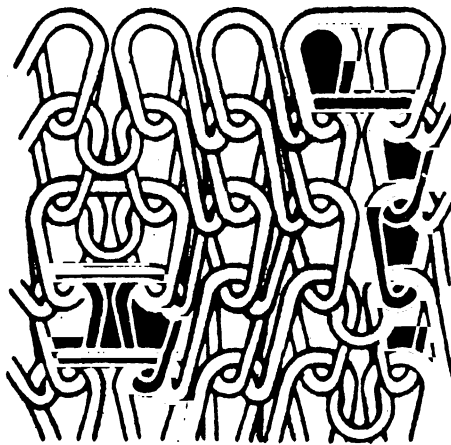


FIG. 32 PELERINE

Perching — A process of examining fabrics and garments for defects.

pH Value — The logarithm to the base 10 of the reciprocal of the concentration of hydrogen ions in an aqueous solution. It is a convenient method of expressing small differences in the acidity or alkalinity of nearly neutral solutions. For solutions on acid side the pH value is less than 7 and on the alkaline side it is more than 7.

Pile Fabric (Knitted) — A fabric having elongated loops of yarn projecting on its surface which are cut.

Pilling — A term applied to accumulation of fibres in the form of pills on the surface of a fabric developed during wear and which are held to the fabric by an entanglement with the surface fibres of the material.

Pin Holes — Very small holes caused by loop distortion. Also known as 'Fisheye'.

Pique (Warp-Knitting) — A fabric, normally made with two guide bars, showing pronounced cord effects in the wales direction. The portions between the cords are made by omitting one or more threads from the guide bar that is making the smaller underlap.

Pique (West-Knitting)

- a) **Single Pique Fabric* — A six-course interlock fabric which differs from ordinary interlock at the third and sixth courses by tucking on one bed.

For circular knitting machines, the repeat sequence is as follows:

<i>Feeder No.</i>	<i>Dial</i>	<i>Cylinder</i>
1	Knit odd needles	Knit even needles
2	Knit even needles	Knit odd needles
3	Tuck odd needles	Knit even needles
4	Knit even needles	Knit odd needles
5	Knit odd needles	Knit even needles
6	Tuck even needles	Knit odd needles

- b) *Double Pique Fabric* — A special type of knitted fabric made on circular rib machines by knitting successively with odd number of dial needles at Feeder No. 1 and 2 and even number of dial needles at Feeder No. 3 and 4 and on cylinder needles knitting and missing on alternate feeders.

For circular knitting machines, the repeat sequence is as follows:

<i>Feeder No.</i>	<i>Dial</i>	<i>Cylinder</i>
1	Knit odd needles	Knit all
2	Knit odd needles	None knit
3	Knit even needles	Knit all
4	Knit even needles	None knit

Also known as 'Overknit Fabric'.

- c) **Texipique Fabric* — A six-course interlock fabric which differs from ordinary interlock at the third and sixth courses by tucking on both beds.

For circular knitting machines, the repeat sequence is as follows:

<i>Feeder No.</i>	<i>Dial</i>	<i>Cylinder</i>
1	Knit even needles	Knit odd needles
2	Knit odd needles	Knit even needles
3	Tuck even needles	Tuck odd needles
4	Knit odd needles	Knit even needles
5	Knit even needles	Knit odd needles
6	Tuck odd needles	Tuck even needles

Placket Shirt — A full sleeved shirt with two or three buttons underneath the collar. Very often, the colour of the placket and collar contrast with the colour of the body of the shirt.

Plain Fabric (Knitted) — The simplest weft-knitted fabric made on one set of needles in which all the loops are intermeshed in one direction. Also known as 'Jersey Fabric' (see Fig. 33).

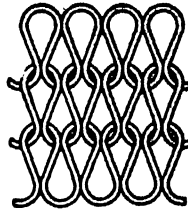


FIG. 33 PLAIN FABRIC (KNITTED)

Plain Stitch (Knitting) — A primary weft-knitting stitch made on one set of needles (*see* Fig. 45 on P 43).

Plating (Knitting) — The controlled knitting of two different yarns in the same stitch such that each yarn takes up a definite position within the stitch. Plating usually involves the knitting of two yarns of different colour, lustre or composition, so that only one of these yarns is visible on the face of the stitch.

Plush Fabric (Knitted) — A fabric made with uncut elongated loops of yarn projecting on the reverse side of some or all stitches. Also known as 'Terry Fabric (Knitted)'.
'

Point Seaming — *See* 'Linking'.

Point Splicing — High splicing above heel diverging from a point. Also known as 'Taper Splicing'.

Point-to-Point Seaming — *See* 'Linking'.

Polka Rib — *See* 'Full Cardigan Stitch'.

Polo Shirt — A type of sports shirt with crew neck and short sleeves, usually of solid colour with rib trimmings of contrasting colour around the neckline and at the sleeve ends; generally worn by polo players.

***Pre-boarding, Pre-Setting** — The operation of boarding carried out on garments or stockings usually before they are scoured and dyed.

Note — Woven or warp-knitted articles are usually made from fabric that has been pre-set by either moist steam or dry heat according to established methods for stabilizing the fabric, and finished goods made from set fabric do not need to be pre-boarded. On the other hand, hosiery made from knitted fabric which has not been stabilized or fashioned depends to great extent on the pre-boarding operation for conferring on them their final shape and ability to resist permanent creasing in such treatments as dyeing.

Pre-boarding is confined mainly to fabrics or articles made from synthetic-polymer yarns (for example, nylon) and is done by submitting them to the action of steam under pressure or dry heat so that they acquire the desired shape.

In addition to removing the stretch imposed on the yarns during manufacture, the treatment stabilizes the dimensions of the articles so that they undergo no further change

of snape during subsequent scouring and dyeing, provided that these processes are carried out under conditions less severe than those used during the pre-boarding. In general practice, stockings are drawn over stainless-steel formers and subjected to wet steam at 1.75 kg/cm² (or 25 lb/in²) pressure for a pre-determined time. The lengthwise shrinkage of the stocking thereby produced is usually about 50 mm (or 2 in).

***Press-Off (Knitting)** — The casting-off of the fabric from the needles by virtue of the fact that the supply of yarn has failed.

Press-Off Stitch — See ' Float Stitch '.

Pullover — A knitted outer garment with full sleeves, tight-fitting border at the bottom and without front-opening (see Fig. 29).

Purl Fabric — A weft-knitted fabric in which some loops contained within the same wale are intermeshed in one direction and the other loops in the opposite direction. Also known as ' Pearl Fabric ' or ' Links-Links Fabric ' (see Fig. 34).

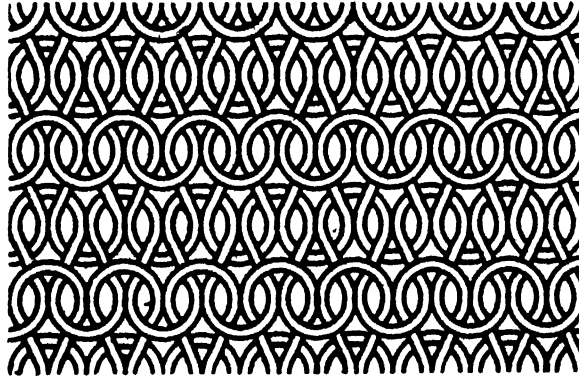


FIG. 34 PURL FABRIC (1 × 1)

Puttee (Knitted) — A thick knitted woollen felted cloth strip used as a kind of gaiter or legging for wrapping round the ankle and the leg; generally used by soldiers, riders, etc.

Q

Queen's Cord (Knitting) — A two-bar warp-knitted construction made with full-set threading in both guide bars. The lapping movement of the back guide bar involves underlapping of 2, 3 or 4 needle spaces while the front guide bar chains continuously on the same needle.

R

Rack (Racking) — See ' Shog (Shogging) '.

Raised-Design Fabric — See ' Relief Fabric '.

Raising — See ' Brushing '.

Reduced Heel — A defective heel made by reducing the number of active needles forming the heel.

Reinforcement — Strengthening of any portion of the knitted garment which is subjected to harsher wear either by splicing or by sewing or affixing other material.

Relative Humidity — The ratio of the actual pressure of the water vapour in the atmosphere to the saturation vapour pressure at the same temperature. The ratio is usually expressed as a percentage.

Relief Fabric — A compound or double fabric with a figured blister raised effect; usually produced on a rib jacquard machine. The ground yarn is knitted on all or alternate needles in one set and on selected needles in the other set. This takes place not more frequently than every third course. The patterning yarn (or yarns) is knitted on selected needles of the second set to give a preponderance of loops of the patterning yarn on the face side of the fabric. Also known as 'Blister Fabric', 'Bourrelet Fabric', 'Cloque Fabric', 'Held-Loop Fabric', 'Ottoman Rib Fabric', 'Raised-Design Fabric', 'Ripple Fabric' and 'Roll-Welt Fabric'.

***Reverse Plating** — In plain-plated fabrics, reversal of the yarn positions within certain stitches so that the opposite yarn appears on the face of the fabric.

Reversibles — Such garments which can be worn either side.

Rib Fabric (Knitted) (1 × 1) — A weft-knitted fabric made on two sets of needles in which all the loops of alternate wales are intermeshed in one direction and all the loops of the other wales knitted at the same courses are intermeshed in the other direction (see Fig. 35).

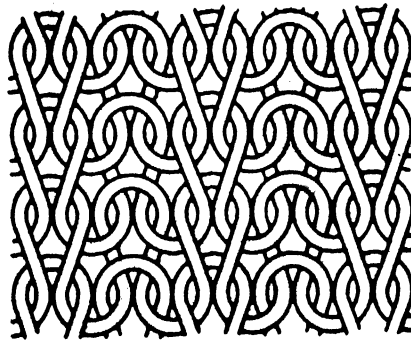


FIG. 35 RIB FABRIC (KNITTED) (1 × 1)

Rib Fabric (Knitted) (2 × 2) — A weft-knitted fabric made on two sets of needles in which all the loops of alternate pairs of wales are intermeshed

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in one direction and all the loops of the other pairs of wales knitted at the same courses are intermeshed in the other direction (*see* Fig. 36). Also known as ' Corduroy (Knitted) ' and ' Swiss Rib '.

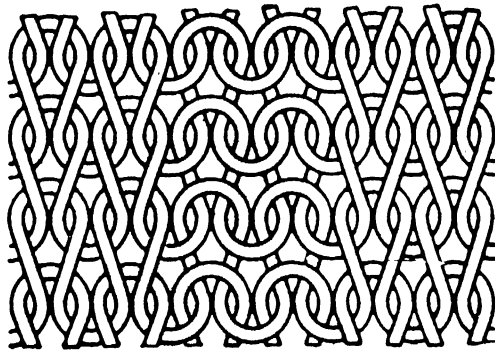


FIG. 36 RIB FABRIC (KNITTED) (2 × 2)

Rib Stitch — A primary weft-knitting stitch made on two sets of needles [*see also* ' Rib Fabric (Knitted) (1 × 1) ' and ' Rib Fabric (Knitted) (2 × 2) '].

Rib Top (Ribbed Top) — Top (of socks or stockings) made in 1 × 1 rib.

Rigolette — A light-weight knitted scarf worn by ladies as head-covering.

Ring (Knitting) — A fault in a circular-knitted fabric appearing as a light or dark stripe and arising from differences in (a) lustre, (b) dyeing affinity (or unlevel dyeing), (c) yarn spacing or loop length, or (d) yarn count; or from defective plating.

Ripple Fabric — *See* ' Relief Fabric '.

RNS Vest — Vest with round neck and with short sleeves (*see* Fig. 37).

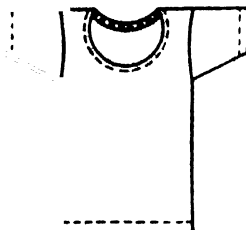


FIG. 37 RNS VEST

RN Vest — Vest with round neck and without sleeves. Also known as 'Sandow' (see Fig. 38).

Note — These vests are made either with narrow shoulder straps (cross-cut) or with broad shoulder straps (shape-cut).

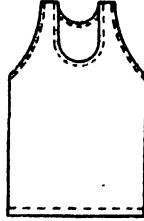


FIG. 38 RN VEST

Roll Welt — A welt produced on rib machine by knitting on one set of needles for a few courses (generally not exceeding 4) and non-knitting on the other set of the needles while they retain their old loops. This is followed by knitting on both sets of needles together on rib basis. This gives a roll effect on one side of the fabric. Also known as 'English Welt'.

Roll Welt Fabric — See 'Relief Fabric'.

Round Neck — A term applied to neck-opening designed, cut or finished in round shape.

***Roving Courses** — Additional courses used either as protective courses or to facilitate handling in subsequent operations in the manufacture of knitted articles. These courses are afterwards removed.

Royal Rib — See 'Half Cardigan Stitch'.

***Running-On** — The operation of placing a series of loops into points or needles preparatory to further knitting or to joining fabrics together by linking.

S

Sandow — See 'RN Vest'.

Satin (Knitted) — A two-guide bar warp-knitted fabric in which the front-bar underlaps are arranged with a view to produce a smooth surface. Typical front-bar laps are $1-0/3-4$ or $1-0/4-5$ and back-bar laps are $1-0/1-2$.

Scarf (Knitted) — A piece of knitted fabric used as covering for head or neck, or both.

Scouring — A process of cleansing fibre, yarn or fabric of impurities.

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Seam — A seam is a joint consisting of a sequence of sewing stitches uniting two or more pieces of material and is used for assembling parts in production of sewn items.

Seamcovering — A process where the seams already produced are reinforced by sewing to give them a good cover, flatten them, and provide a good appearance. There are two rows of needle stitches parallel to the seam on the outside of the garment and on the inside there is a soft heavy looper thread which crosses the seam connecting the two lines of needle stitches (see Fig. 39).

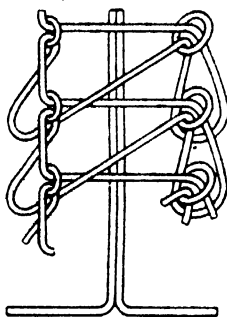


FIG. 39 SEAMCOVERING

Seamed Welt — See ' Hem '.

Seamless Hosiery — Hosiery-knitted in tubular form on a circular machine.

Seconds (Hosiery) — Hosiery, which owing to some fault or imperfection, does not meet an agreed standard of quality.

Selvedged Hosiery — See ' Fully-Fashioned Hosiery '.

Selvedge (Knitted) — A longitudinal secured edge of a flat-knitted fabric formed during knitting.

Selvedge Seaming — See ' Cup Seaming '.

Separating Course — A slack course of knitted loops separating one garment or garment part from another which on removal permits the separation of articles that are knitted in a succession of units connected together. Separating courses may be cut, ravelled, or dissolved, and several such courses may be made consecutively.

Sewed Toe — The toe of a knitted footwear closed by overlocking rather than by linking.

Shadow Welt — See 'After-Welt'.

Shaped Hosiery — Hosiery which is shaped wholly or in part by varying the type or length of stitch on weft knitting machines without increasing or decreasing the number of wales.

Sharkskin Fabric (Knitted) — A warp-knitted fabric, the characteristic of which is a firm construction and a rather stiffy handle. The usual warp-knitted sharkskin is a two-bar construction made with full-set threading in both guide bars. The lapping movement of the back guide bar involves underlapping of 3 or 4 needle spaces, and that of the front guide bar of one needle space in the opposite direction.

Shawl (Knitted) — A rectangular flat piece of knitted fabric generally with tassels used by ladies for wrapping round the upper part of the body.

***Shell-Stitch Fabric** — A warp-knitted fabric, having a raised shell-like surface produced by holding loops on certain needles while knitting on others at each course. The arrangement of the held-loops in pattern formation gives the shell-like effect.

Shirt (Gents) — An outer garment with buttoned front-opening, designed to cover the trunk of the body, having half or full sleeves and with collared neck (see Fig. 40).

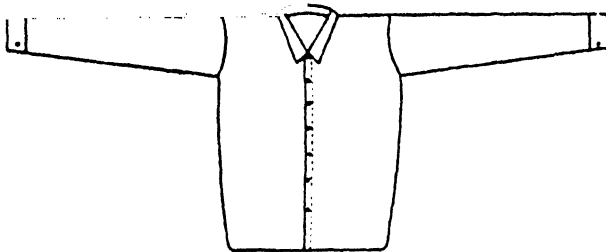


FIG. 40 SHIRT (GENTS)

***Shoddy** — The fibrous material made in the woollen trade by pulling down new or old knitted or loosely woven fabrics in rag form (see also 'Mungo').

Shog (Shogging) — Lateral movement of needlebed on a flat-knitting machine or angular displacement of dial relative to cylinder on a circular-knitting machine or a lateral movement of yarn guide bars on a warp-knitting machine. Also known as 'Rack (Racking)'.

Short Drawers — See (a) under 'Drawers'.

Short Rib Fabric — Full cardigan fabric made by using one colour at the first feeder and the second colour at the second feeder (successively), so

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that one colour appears on the face and the other on the back of the fabric when contracted.

Silk Lap (Warp Knitting) — A traversing motion in the form of open laps in which the warp threads progress by two needle spaces, making an overlap and an underlap at each course.

Simplex Fabric — See (a) under ' Double-Faced Fabric '.

Singed Yarn — See ' Gassed Yarn '.

Singeing — See ' Gassing '.

Single Atlas — See (a) under ' Atlas '.

Single Chain Stitch — See (a) under ' Chain Stitch '.

Single Pique Fabric — See (a) under ' Pique (Weft Knitting) '.

Singlet — A sleeveless vest with round neck and wide shoulders; with welting around the neck-opening and armholes (see Fig. 41).

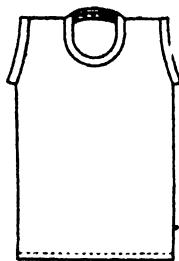


FIG. 41 SINGLET

Single Vandyke — See (a) under ' Atlas '.

Sinker Loop — See (b) under ' Loop (Knitting) '.

Skein — A definite length of yarn in the form of a coil made on a reel of specified girth.

Skiers' Sweater — High-necked heavy-weight sweater with full sleeves; generally used by skiers.

Skirt — A ladies' garment which is fitted around the waist and hangs down.

***Slack Course** — A course of knitting made with loops longer than normal for a special purpose, for example, linking, running-on, separating garments, etc.

Slipon — A ladies' knitted outer garment without front-opening with three-quarters, half, short or batwing sleeves and tight-fitting border at the bottom.

Slipover — A knitted outer garment without sleeves, with tight-fitting border at the bottom and without front-opening (see Fig. 42).

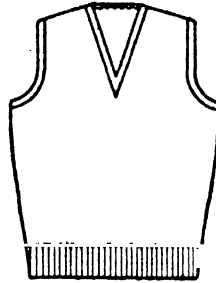


FIG. 42 SLIPOVER

Slumberwear — An underwear used by ladies while sleeping.

Slurgalling — A term applied to variation in loop length along a single course or between courses.

Snag — A defect in a knitted fabric caused by thread or threads which have been accidentally caught and pulled out of position.

Snow Cap — A type of balaclava cap made of two folds of knitted fabrics one of which is white and the other dyed; used at high altitudes (see ' Balaclava Cap ').

Sock, Socks — Knitted footwear where the length of the leg portion extends to about mid-way between the ankle and the knee. It has either a rib top or elastic top. Also known as ' Half Hose ', ' JURAB ', and ' Sox ' (see Fig. 43).

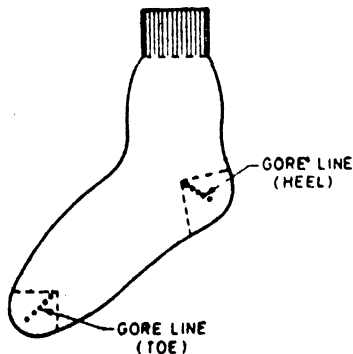


FIG. 43 SOCK

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Solid Design — See 'Intarsia Design'.

Sox — See 'Socks'.

***Spirality** — Distortion of a circular-knitted fabric in which wales follow a spiral path around the axis of the tube. It is caused by using yarn that is twist-lively, the direction and degree of spirality being influenced by the direction and degree of twist-liveliness.

NOTE — Fabrics made on circular knitting machines have an inherent inclination of the courses to the wales. This should not be confused with spirality.

Splicing — A term applied to reinforcement of any portion of hosiery by knitting extra yarn(s) along with the main yarn.

Split Foot — The foot of a knitted footwear where the sole is knitted from a different yarn than that used in knitting the instep.

Split Sole — The sole of the split foot.

Sports Pullover — A V-necked pullover with coloured stripes at the neck, cuffs and the border; generally used by sportsmen.

Sports Shirt (Knitted) — A half or short-sleeved shirt of short length and with collar; generally used by sportsmen (see Fig. 44).

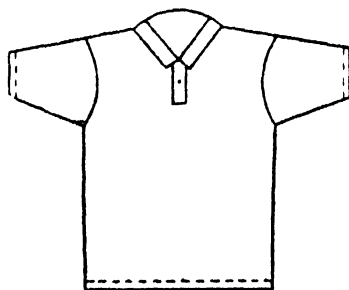


FIG. 44 SPORTS SHIRT

***Spread Loop** — A needle loop expanded over two or more wales.

NOTE — Applied to stockings, the term refers to expansion over two wales and the stockings are described as 'mesh' or (technically) 'half-point transfer'. The stitch has ladder-resistant properties.

Standard Condition — The condition of a textile material when it reaches moisture and temperature equilibrium with standard atmosphere for testing.

Standard Moisture Regain — Commercial moisture regain accepted as standard (see also 'Commercial Moisture Regain').

Stitch Density — The number of stitches per unit area of a knitted fabric.

***Stitch (Knitting)** — An intermeshed loop or loops (see Fig. 45).



FIG. 45 STITCH (KNITTING) (PLAIN)

Stitch (Sewing) — Stitch made by sewing.

Stockinette — A plain-knitted tubular cotton fabric of loose texture; generally used for cleaning machinery and for wrapping meat. Also known as ' Mutton Cloth '.

Stockings — Knitted footwear where the length of the leg portion extends to just below the knee. It has either a ' rib top ' or ' turn-over top '. Also known as ' *JURAB* ' and ' Three-Quarters Hose ' (see Fig. 46).



FIG. 46 STOCKING

String Vest — A coarse net-type cotton vest made from fabric knitted on Raschel warp knitting machines; used as undershirt at high altitudes.

Stump Sock — A tubular knitted fabric shaped on the machine according to the requirement and closed at one end; used as a covering for the stump of the amputated portion of the body.

S-Twist — The twist in yarn due to which its spirals are in line with central portion of letter 'S', when the yarn is held in a vertical position (*see* Fig. 47).



FIG. 47 S-TWIST

***Sweater** — A generic term for tight-fitting knitted outer garment such as cardigan, pullover and slipover.

Swimming Costume — *See* ' Bathing Costume '.

Swimming Trunk — *See* ' Trunk '.

Swiss Rib — *See* ' Rib Fabric (Knitted) (2 × 2) '.

T

Tape (Knitted) — A knitted fabric strip of narrow width with or without selvages.

Taper Splicing — *See* ' Point Splicing '.

Tassels — An ornamentation, consisting of tufts of loosely hanging pieces of yarn, tied at equal intervals on both ends (widths) of the mufflers or shawls. Also known as ' *BUMBLES* '.

Tennis Shirt (Knitted) — A white sports shirt; generally used by tennis players [*see* ' Sports Shirt (Knitted) '].

Tennis Socks — *See* (a) under ' Anklet '.

Terry Fabric (Knitted) — *See* ' Plush Fabric (Knitted) '.

tex — The primary unit in a system of units for expressing the universal count of yarn (*see* Note); the weight in grams of one kilometre of yarn.

NOTE — This system is also intended to be used for expressing the weight per unit length of fibres and other textile products like ropes and rovings. The following multiple and sub-multiple units may be used to avoid large numbers and small fractions, respectively.

1 k tex (kilo-tex) = 1 000 tex
1 m tex (milli-tex) = 0.001 tex

Texipique Fabric — See (c) under 'Pique (West Knitting)'.

Three-quarters Hose — See 'Stockings'.

Three-Thread Overlock Stitch — See (b) under 'Overlock Stitch'.

Ties — A narrow width neckwear passing underneath the collar and tied with an elegant knot in the front.

Tinting — Colouring of fibres and yarns with fugitive colours to permit of easy distinction.

Toe Gore Line — See 'Gore Line (Toe)'.

TOPA — An Indian term for 'Balaclava Cap' and 'Monkey Cap' (see 'Balaclava Cap' and 'Monkey Cap').

Top-Dyed Yarn — Yarn made from dyed tops. Also known as 'Ingrain Yarn'.

Tricot Fabric — Originally, a warp-knitted fabric with two full sets of warp threads each set making a 1 and 1 lapping movement but in opposite directions. The term is now used in a generic sense to cover many types of warp-knitted fabrics.

Trimmings (Knitted) — Strips of knitted fabric of fancy character used generally for the purpose of decorating or adorning clothing but often fulfilling a utilitarian purpose.

Trunk — A knitwear having the shape of briefs but stronger in quality used for bathing or swimming. Also known as 'Bathing Trunk' and 'Swimming Trunk'.

T-Shirt (Knitted) — A half-sleeved or short-sleeved outerwear with round neck and with folded rib tape attached to the neck and sometimes to sleeves and bottom also (see Fig. 48).

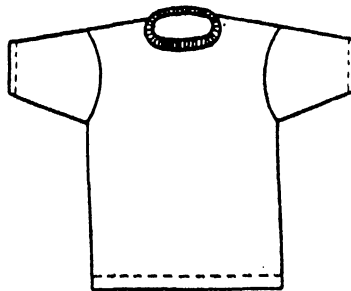


FIG. 48 T-SHIRT

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Tubular Fabric — Fabric made on circular knitting machines.

Tubular Welt — A welt produced on a rib machine by knitting on plain needles and rib needles, alternately, to form a tubular section of plain fabric. This is followed by knitting both the sets of needles together on a rib basis. Also known as 'French Welt'.

Tucking — A defect caused by a tuck loop or loops inadvertently produced in a knitted fabric.

Tuck Ripple — Relief fabric produced on the basis of tuck stitches (see 'Relief Fabric').

Tuck Stitch — The stitch made when a needle retains one loop and takes on one or more additional loops before casting them off (see Fig. 49).

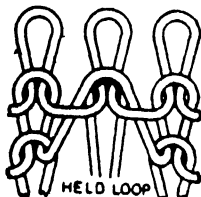


FIG. 49 TUCK STITCH (SHOWN FROM BACK OF FABRIC)

Turned Top — See 'Turn-Over Top'.

Turned Welt — See 'Inturned Welt'.

Turn-Over Top — Top (of socks or stockings) which is made sufficiently longer than usual to be turned outside during use. Also known as 'Turned Top' (see Fig. 50).



FIG. 50 TURN-OVER TOP

Twin Set, Twin Suit — A set of ladies' outerwear consisting of *JUMPER* and cardigan (worn together); generally of the same shade and quality. Also known as 'Twin Suit'.

Twist

- a) The spiral disposition of the components of a yarn which is usually the result of relative rotation of the two ends.

- b) The number of turns per unit length of a yarn expressed as turns per metre (tpm).

Twist Multiplier — A factor which when multiplied or divided by the square root of the yarn number gives the number of turns per unit length as under:

Indirect System — Turns per unit length = factor $\times \sqrt{\text{yarn number}}$

Direct System — Turns per unit length = $\frac{\text{factor}}{\sqrt{\text{yarn number}}}$

Two-Thread Overlock Stitch — See (a) under 'Overlock Stitch'.

U

Under Pants — See (c) under 'Drawers'.

Underwear (Knitted) — Knitwear worn next to the skin and under other garments, for example, drawers, vest, etc.

Union Suit — See 'Combination Suit'.

Union Yarn — Yarn made by mixing and spinning two or more different kinds of fibres, for example, cotton and wool, wool and terene, etc.

V

Vest — A knitted undershirt. Also known as 'BANIAN' and 'GANJI'.

V-Neck — A term applied to neck-opening designed, cut or finished in the shape of letter 'V' (see Fig. 51 and 52).

VNS Vest — Vest with V-neck and with short sleeves (see Fig. 51).

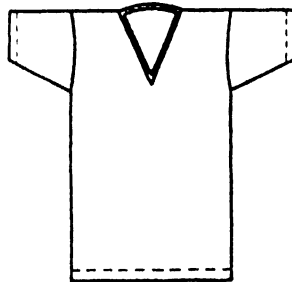


FIG. 51 VNS VEST

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VN Vest — Vest with V-neck and without sleeves (see Fig. 52).

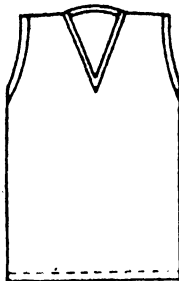


FIG. 52 VN VEST

W

Waist Coat (Knitted) — A V-necked sleeveless garment with full front-opening with a closure device and extending just below the waistline.

Wale — A longitudinal chain of loops in a knitted fabric or garment formed by one needle.

Wales/5 cm — The number of wales in 5 cm measured along a course of a knitted fabric or garment.

Warp Knitting — A method of knitting in which the loops made from each warp thread are formed substantially along the length of the fabric, characterized by the fact that each warp thread is fed more or less in line with the direction in which the fabric is produced.

***Web Fabric (Knitted)** — A plain, circular knitted fabric.

Weft Knitting — A method of knitting in which the loops made by each weft thread are formed substantially across the width of the fabric, characterized by the fact that each weft thread is fed more or less at right angles to the direction in which the fabric is produced.

***Welt** — A secure edge of a knitted fabric or garment made during, or subsequent to, the knitting process. Welts made during the knitting process usually occur at the starting end of the fabric and are formed parallel to the course. Seamed welts, which are made after the knitting process, may occur in any position in the fabric (see also ' Hem ').

Widening — The act of increasing the width of the fabric or garment by increasing the number of wales during knitting to get the desired shape.

Winding — An operation of transferring yarn from one form of package to another.

Woolen Yarn — Yarn produced by carding, condensing and spinning wool fibres, new or otherwise, in which the fibres cross each other in every direction presenting a rough surface.

Worsted Yarn — Yarn produced by carding, combing and spinning wool fibres, in which the fibres are reasonably parallel to the axis of the yarn.

Wristlet — A tubular band knitted on round machines with elastic threads laid-in, used by sportsmen for support and protection to the wrist (see Fig. 53).



FIG. 53 WRISTLET

Y

Yarn — A continuous strand of textile fibres or filaments suitable for knitting, weaving, or otherwise intertwining to form a textile fabric. It generally occurs in the following forms:

- a) *Spun Yarn* — A yarn composed of fibres (short length or staple) twisted together.
- b) *Filament Yarn* — A yarn composed of (continuous) filaments assembled, with or without twist.
- c) *Monofilament* — with or without twist.
- d) *Narrow Strip* — of material, such as paper, cellophane or metal foil, with or without twist.

NOTE — Varieties include single yarn, plied yarn, cabled yarn, cord, thread, fancy yarn, etc.

Yarn Count — See 'Count'.

Y-Neck — A term applied to neck-opening designed cut or finished in the shape of letter 'Y' (see Fig. 54).

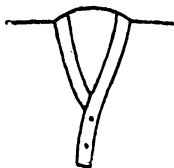


FIG. 54 Y-NECK

Z

Z-Twist — The twist in yarn due to which its spirals are in line with central portion of letter 'Z', when the yarn is held in a vertical position (see Fig. 55).



FIG. 55 Z-TWIST

APPENDIX A

(Note Under 'Gauge')

COMMON GAUGING SYSTEMS

<i>Machine</i>	<i>Gauge</i>
Straight-bar plain	Number of needles in 38.1 mm (1.5 in)
Straight-bar rib	Number of needles in 38.1 mm (1.5 in) of either set
Bearded-needle knitting	w a r p <i>English</i> — Number of needles in 25.4 mm (1 in) <i>Saxon</i> — Number of needles in 1 Saxon inch (Saxon inch = 23.6 mm)
Simplex	Number of needles in 25.4 mm (1 in) or 23.6 mm (1 in Saxon) of one needle bar only
Bearded-needle (challenger type)	circular Number of needles in 25.4 mm (1 in) of circumference
Loop-wheel	Number of needles in 38.1 mm (1.5 in) of circumference (theoretically)

<i>Machine</i>	<i>Gauge</i>
Sinker-wheel	<i>Fein</i> — Number of needles in 1 zoll <i>Grob</i> — Number of needles in $1\frac{1}{2}$ zoll (the gauge is measured along the arc of the holes drilled in the needle ring to receive the cranked ends of the needles) NOTE — 1 Zoll = $\frac{1}{36}$ of 1 m (1.09 in approx).
F.N.F. warp knitting	Number of needles in 25.4 mm (1 in)
Latch-needle circular	Number of needles in 25.4 mm (1 in) of circumference
Circular rib and interlock	Number of tricks in 25.4 mm (1 in) of circumference of cylinder or dial or both, for example, a machine with 10 tricks per 25.4 mm (1 in) in both cylinders and dial may be defined as a 10-gauge machine, or as a 10 × 10 gauge machine
Circular purl	Number of needles in 25.4 mm (1 in) of circumference
Flat knitting	<i>English</i> — Number of tricks in 25.4 mm (1 in) of one needle bed <i>Swiss</i> — Needle spacing in millimetres multiplied by 10
Flat purl	<i>English</i> — Number of needles in 25.4 mm (1 in) <i>Swiss</i> — Needle spacing in millimetres multiplied by 10
Seamless hose and half-hose	Number of needles in machine and diameter of needle cylinder in inches, for example, $370 \times 4\frac{1}{2}$ 370 needles in a cylinder of 114.3 mm ($4\frac{1}{2}$ in) diameter
Latch-needle warp knitting	<i>English</i> — Number of needles in 50.8 mm (2 in) of one needle bed <i>Saxon</i> — Number of needles in 47.2 mm (2 Saxon inches) of one needle bed

<i>Machine</i>	<i>Gauge</i>
Linking and point-seaming	<i>English</i> — Points in an arc of 38·1 mm (1·5 in) <i>American</i> — Points in an arc of 25·4 mm (1 in)

NOTE — The terms 'gauge' and 'point' respectively, are used to define the two systems, for example, a 36-gauge linking machine has 24 points per 25·4 mm (1 in) and a 24-point linking machine has 24 points per 25·4 mm (1 in).

NOTE 1 — When the term 'gauge' is used with reference to a knitted fabric or garment, it usually denotes the gauge of the knitting machine on which it was made.

NOTE 2 — It is recommended that as India has adopted the metric system, the gauge for all types of knitting machines be expressed as the number of needles or other loop forming elements per 5 cm.

INTERNATIONAL SYSTEM OF UNITS (SI UNITS)

Base Units

QUANTITY	UNIT	SYMBOL
Length	metre	m
Mass	kilogram	kg
Time	second	s
Electric current	ampere	A
Thermodynamic temperature	kelvin	K
Luminous intensity	candela	cd
Amount of substance	mole	mol

Supplementary Units

QUANTITY	UNIT	SYMBOL
Plane angle	radian	rad
Solid angle	steradian	sr

Derived Units

QUANTITY	UNIT	SYMBOL	DEFINITION
Force	newton	N	1 N = 1 kg.m/s ²
Energy	joule	J	1 J = 1 N.m
Power	watt	W	1 W = 1 J/s
Flux	weber	Wb	1 Wb = 1 V.s
Flux density	tesla	T	1 T = 1 Wb/m ²
Frequency	hertz	Hz	1 Hz = 1 c/s (s ⁻¹)
Electric conductance	siemens	S	1 S = 1 A/V
Electromotive force	volt	V	1 V = 1 W/A
Pressure, stress	pascal	Pa	1 Pa = 1 N/m ²

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Eastern : 5 Chowringhee Approach	CALCUTTA 700072	27 50 90
Southern : C.I.T. Campus	MADRAS 600118	41 24 42
Northern : B69, Phase VII	S.A.S. NAGAR (MOHALI) 160051	8 78 26

Branch Offices :

'Pushpak', Nurmohamed Shaikh Marg, Khanpur	AHMADABAD 380001	2 03 91
'F' Block, Unity Bldg, Narasimharaja Square	BANGALORE 560002	22 48 05
Gangotri Complex, Bhadbhada Road, T.T. Nagar	BHOPAL 482003	6 27 16
22E Kalpana Area	BHUBANESHWAR 751014	5 36 27
5-8-56C L. N. Gupta Marg	HYDERABAD 500001	22 10 83
R 14 Yudhister Marg, C Scheme	JAIPUR 302005	5 26 32
117/418 B Sarvodaya Nagar	KANPUR 208005	4 72 92
Patliputra Industrial Estate	PATNA 800013	6 28 08
Hantex Bldg (2nd Floor), Rly Station Road	TRIVANDRUM 695001	32 27

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